

## MICROBIAL CONTAMINATION OF COSMETICS

Litovchenko A.A., Silaeva L.F.

National University of Pharmacy, Kharkiv, Ukraine

microbiology@ukra.kharkov.ua

Microbial contamination of cosmetic products can cause spoiling of the product, and in some cases it cause a health risk. Modern cosmetic products composed of multiple components, in aqueous media can be an ideal substrate for microorganisms, including pathogens.

So, in the production of cosmetics necessary delay or prevent the growth of foreign microflora. That's why cosmetics include antimicrobial agents, preservatives, which should keep the safety of the product for the consumer. The safety of traditional / chemical preservatives raises many questions. Parabens (the most widely used preservatives in the world) can cause a negative health effects.

The aim of this is substantiation of development cosmetics without preservatives, so-called "selfpreserving" cosmetics. In such cosmetics the traditional preservatives substituted by other cosmetic ingredients with antimicrobial properties. Selfpreserving cosmetics production carried out according to the principles of "barrier technology". This term means that the production is used the promptness of various preserving factors or barriers that prevent access of microorganisms in the final product or creating in the product bacteriostatic medium. So the aim of this technology is blocking microorganisms growth through various factors. Every factor should decrease survival potential, that would progress through the barriers the number of surviving bacteria will continue to decrease and eventually reach zero.

We studied the main methods used for the manufacture of cosmetic products with non-traditional preservatives within the concept of barrier technology.